

Serial Number: 09/980,364

CRF Processing Date:

Edited by:

Verified by:

5/31/2002

(STIC staff)

ENTERED

Changed a file from non-ASCII to ASCII

Changed the margins in cases where the sequence text was "wrapped" down to the next line.

Edited a format error in the Current Application Data section, specifically:

---

Edited the Current Application Data section with the actual current number. The number inputted by the applicant was  the prior application data; or  other \_\_\_\_\_

Added the mandatory heading and subheadings for "Current Application Data".

Edited the "Number of Sequences" field. The applicant spelled out a number instead of using an integer.

Changed the spelling of a mandatory field (the headings or subheadings), specifically:

---

Corrected the SEQ ID NO when obviously incorrect. The sequence numbers that were edited were:

---

Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited:

---

Corrected subheading placement. All responses must be on the same line as each subheading. If the applicant placed a response below the subheading, this was moved to its appropriate place.

Inserted colons after headings/subheadings. Headings edited included:

---

Deleted extra, invalid, headings used by an applicant, specifically:

---

Deleted:  non-ASCII "garbage" at the beginning/end of files;  secretary initials/filename at end of file;  page numbers throughout text;  other invalid text, such as \_\_\_\_\_

Inserted mandatory headings, specifically: \_\_\_\_\_

Corrected an obvious error in the response, specifically:

---

Edited identifiers where upper case is used but lower case is required, or vice versa.

Corrected an error in the Number of Sequences field, specifically:

---

A "Hard Page Break" code was inserted by the applicant. All occurrences had to be deleted.

Deleted **ending** stop codon in amino acid sequences and adjusted the "(A)Length:" field accordingly (error due to a PatentIn bug). Sequences corrected: \_\_\_\_\_

Other:

---



---



---

\* Examiner: The above corrections must be communicated to the applicant in the first Office Action. DO NOT send a copy of this form.

3/1/95



PCT09

RAW SEQUENCE LISTING DATE: 06/02/2002  
PATENT APPLICATION: US/09/980,364 TIME: 17:15:43

Input Set : A:\PTO.AMC.txt  
Output Set: N:\CRF3\05312002\I980364.raw

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/09/980,364DATE: 06/02/2002  
TIME: 17:15:43Input Set : A:\PTO.AMC.txt  
Output Set: N:\CRF3\05312002\I980364.raw

54 gccaacgc tgcggttcag catcatcagg gagtagattt gagcttattt cacaacatc 1440  
 55 aagagggta caatggttat tattacaatc gaggaaactt gtcttcggag agtgtctagg 1500  
 56 cttgtttcaaa acaaggaggat gatcaacacc atttctttag caaacccggc agcctccatga 1560  
 57 ctaatatcga tcatcaaatg ttgtttcgg atgatttcgg tactgtttgt gggaaatgttg 1620  
 58 ttggttatcg ttgtttatcaa ggatttgcg ccccggttaa ctgcgtatgc tacgtctgtc 1680  
 59 gtgagtttgc ttataccggc agaaaccattt atttcttc tcacgcacgc cagaccgc 1740  
 60 agtcggccagg tggagattttt ccccgccggaa tgacgaaataa tgttggctct aatatgtt 1800  
 61 accatggga aggtgttgcg gaagtgtcgc caacatttc acgttggAAC gacaatttaga 1860  
 62 aaaaatagtgc aaatgttgcg attgttgcg gttgttgcg gttgttgcg aatgtgtatac 1920  
 63 ttgttattttt tttttttttct tctttttttc tttttttttgg ttaattttctt aagacttattt 1980  
 64 tttagtttcc attgttgcg taaaattttca gact 2014  
 67 <210> SBQ ID NO: 2  
 68 <211> LENGTH: 579  
 69 <212> TYPE: PRT  
 70 <213> ORGANISM: Brassica napus  
 72 <400> SEQUENCE: 2  
 73 Met Asn Asn Asn Trp Leu Gly Phe Ser Leu Ser Pro Tyr Glu Gln Asn  
 74 1 5 10 15  
 76 His His Arg Lys Asp Val Tyr Ser Ser Thr Thr Thr Thr Val Val Asp  
 77 20 25 30  
 79 Val Ala Gly Glu Tyr Cys Tyr Asp Pro Thr Ala Ala Ser Asp Glu Ser  
 80 35 40 45  
 82 Ser Ala Ile Gln Thr Ser Phe Pro Ser Pro Phe Gly Val Val Val Asp  
 83 50 55 60  
 85 Ala Phe Thr Arg Asp Asn Asn Ser His Ser Arg Asp Trp Asp Ile Asn  
 86 65 70 75 80  
 88 Gly Cys Ala Cys Asn Asn Ile His Asn Asp Glu Gln Asp Gly Pro Lys  
 89 85 90 95  
 91 Leu Glu Asn Phe Leu Gly Arg Thr Thr Ile Tyr Asn Thr Asn Glu  
 92 100 105 110  
 94 Asn Val Gly Asp Gly Ser Gly Ser Gly Cys Tyr Gly Gly Asp Gly  
 95 115 120 125  
 97 Gly Gly Gly Ser Leu Gly Leu Ser Met Ile Lys Thr Trp Leu Arg Asn  
 98 130 135 140  
 100 Gln Pro Val Asp Asn Val Asp Asn Gln Glu Asn Gly Asn Ala Ala Lys  
 101 145 150 155 160  
 103 Gly Leu Ser Leu Ser Met Asn Ser Ser Thr Ser Cys Asp Asn Asn Asn  
 104 165 170 175  
 106 Asp Ser Asn Asn Asn Val Val Ala Gln Gly Lys Thr Ile Asp Asp Ser  
 107 180 185 190  
 109 Val Glu Ala Thr Pro Lys Lys Thr Ile Glu Ser Phe Gly Gln Arg Thr  
 110 195 200 205  
 112 Ser Ile Tyr Arg Gly Val Thr Arg His Arg Trp Thr Gly Arg Tyr Glu  
 113 210 215 220  
 115 Ala His Leu Trp Asp Asn Ser Cys Lys Arg Glu Gly Gln Thr Arg Lys  
 116 225 230 235 240  
 118 Gly Arg Gln Val Tyr Leu Gly Gly Tyr Asp Lys Glu Glu Lys Ala Ala  
 119 245 250 255  
 121 Arg Ala Tyr Asp Leu Ala Ala Leu Lys Tyr Trp Gly Thr Thr Thr

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/09/980,364

DATE: 06/02/2002  
TIME: 17:15:44

Input Set : A:\PTO.AMC.txt  
Output Set: N:\CRF3\05312002\I980364.raw

122 260 265 270  
 124 Thr Asn Phe Pro Met Ser Glu Tyr Glu Lys Glu Val Glu Met Lys  
 125 275 280 285  
 127 His Met Thr Arg Gln Glu Tyr Val Ala Ser Leu Arg Arg Lys Ser Ser  
 128 290 295 300  
 130 Gly Phe Ser Arg Gly Ala Ser Ile Tyr Arg Gly Val Thr Arg His His  
 131 305 310 315 320  
 133 Gln His Gly Arg Trp Gln Ala Arg Ile Gly Arg Val Ala Gly Asn Lys  
 134 325 330 335  
 136 Asp Leu Tyr Leu Gly Thr Phe Gly Thr Gln Glu Ala Ala Glu Ala  
 137 340 345 350  
 139 Tyr Asp Ile Ala Ala Ile Lys Phe Arg Gly Leu Thr Ala Val Thr Asn  
 140 355 360 365  
 142 Phe Asp Met Asn Arg Tyr Asn Val Lys Ala Ile Leu Glu Ser Pro Ser  
 143 370 375 380  
 145 Leu Pro Ile Gly Ser Ala Ala Lys Arg Leu Lys Glu Ala Asn Arg Pro  
 146 385 390 395 400  
 148 Val Pro Ser Met Met Ile Ser Asn Asn Val Ser Glu Ser Glu Asn  
 149 405 410 415  
 151 Ser Ala Ser Gly Trp Gln Asn Ala Ala Val Gln His His Gln Gly Val  
 152 420 425 430  
 154 Asp Leu Ser Leu Leu His Gln His Gln Glu Arg Tyr Asn Gly Tyr Tyr  
 155 435 440 445  
 157 Tyr Asn Gly Gly Asn Leu Ser Ser Glu Ser Ala Arg Ala Cys Phe Lys  
 158 450 455 460  
 160 Gln Glu Asp Asp Glu His His Phe Leu Ser Asn Thr Gln Ser Leu Met  
 161 465 470 475 480  
 163 Thr Asn Ile Asp His Gln Ser Val Ser Asp Asp Ser Val Thr Val  
 164 485 490 495  
 166 Cys Gly Asn Val Val Gly Tyr Gly Gly Tyr Gln Gly Phe Ala Ala Pro  
 167 500 505 510  
 169 Val Asn Cys Asp Ala Tyr Ala Ala Ser Glu Phe Asp Tyr Asn Ala Arg  
 170 515 520 525  
 172 Asn His Tyr Tyr Phe Ala Gln Gln Gln Thr Gln Gln Ser Pro Gly  
 173 530 535 540  
 175 Gly Asp Phe Pro Ala Ala Met Thr Asn Asn Val Gly Ser Asn Met Tyr  
 176 545 550 555 560  
 178 Tyr His Gly Glu Gly Gly Glu Val Ala Pro Thr Phe Thr Val Trp  
 179 565 570 575  
 181 Asn Asp Asn  
 185 <210> SEQ ID NO: 3  
 186 <211> LENGTH: 2011  
 187 <212> TYPE: DNA  
 188 <213> ORGANISM: Brassica napus  
 190 <400> SEQUENCE: 3  
 191 ttctttttt acctttttaacc aagaacttgt tagatcattt tctgaaactcg atgaaataata 60  
 192 actgttgtttt ctttttccttc ttccttcattt aacaaaaatca ccatcgtaag gacgttgtgt 120  
 193 cttccacaccc cacaacccggc gtatgttgtc cggggatgtc ttgttgtatc cggccatgtc 180  
 194 cttccggatgtc gtttttcadcc atccaaaaatc cgttttttttcc tcccttttgtt gtttttccttc 240

RAW SEQUENCE LISTING DATE: 06/02/2002  
PATENT APPLICATION: US/09/980,364 TIME: 17:15:44

Input Set : A:\PT0.AMC.txt  
Output Set: N:\CRF3\05312002\I980364.raw

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/09/980,364

DATE: 06/02/2002  
TIME: 17:15:44

Input Set : A:\PTO.AMC.txt  
Output Set: N:\CRF3\05312002\I980364.raw

254 Asn Val Gly Asp Gly Ser Gly Ser Gly Cys Tyr Gly Gly Gly Asp Gly  
 255 115 120 125  
 257 Gly Gly Ser Leu Gly Leu Ser Met Ile Lys Thr Trp Leu Arg Asn  
 258 130 135 140  
 260 Gln Pro Val Asp Asn Val Asp Asn Gln Glu Asn Gly Asn Ala Ala Lys  
 261 145 150 155 160  
 263 Gly Leu Ser Leu Ser Met Asn Ser Ser Thr Ser Cys Asp Asn Asn Asn  
 264 165 170 175  
 266 Asp Ser Asn Asn Val Val Ala Gln Gly Lys Thr Ile Asp Asp Ser  
 267 180 185 190  
 269 Val Glu Ala Thr Pro Lys Lys Thr Ile Glu Ser Phe Gly Gln Arg Thr  
 270 195 200 205  
 272 Ser Ile Tyr Arg Gly Val Thr Arg His Arg Trp Thr Gly Arg Tyr Glu  
 273 210 215 220  
 275 Ala His Leu Trp Asp Asn Ser Cys Lys Arg Glu Gly Gln Thr Arg Lys  
 276 225 230 235 240  
 278 Gly Arg Gln Val Tyr Leu Gly Tyr Asp Lys Glu Glu Lys Ala Ala  
 279 245 250 255  
 281 Arg Ala Tyr Asp Leu Ala Ala Leu Lys Tyr Trp Gly Thr Thr Thr  
 282 260 265 270  
 284 Thr Asn Phe Pro Met Ser Glu Tyr Glu Lys Glu Val Glu Glu Met Lys  
 285 275 280 285  
 287 His Met Thr Arg Gln Glu Tyr Val Ala Ser Leu Arg Arg Lys Ser Ser  
 288 290 295 300  
 290 Gly Phe Ser Arg Gly Ala Ser Ile Tyr Arg Gly Val Thr Arg His His  
 291 305 310 315 320  
 293 Gln His Gly Arg Trp Gln Ala Arg Ile Gly Arg Val Ala Gly Asn Lys  
 294 325 330 335  
 296 Asp Leu Tyr Leu Gly Thr Phe Gly Thr Gln Glu Ala Ala Glu Ala  
 297 340 345 350  
 299 Tyr Asp Ile Ala Ala Ile Lys Phe Arg Gly Leu Thr Ala Val Thr Asn  
 300 355 360 365  
 302 Phe Asp Met Asn Arg Tyr Asn Val Lys Ala Ile Leu Glu Ser Pro Ser  
 303 370 375 380  
 305 Leu Pro Ile Gly Ser Ala Ala Lys Arg Leu Lys Glu Ala Asn Arg Pro  
 306 385 390 395 400  
 308 Val Pro Ser Met Met Met Ile Ser Asn Asn Val Ser Glu Ser Glu Asn  
 309 405 410 415  
 311 Ser Ala Ser Gly Trp Gln Asn Ala Ala Val Gln His His Gln Gly Val  
 312 420 425 430  
 314 Asp Leu Ser Leu Leu His Gln His Gln Glu Arg Tyr Asn Gly Tyr Tyr  
 315 435 440 445  
 317 Tyr Asn Gly Gly Asn Leu Ser Ser Glu Ser Ala Arg Ala Cys Phe Lys  
 318 450 455 460  
 320 Gln Glu Asp Asp Gln His His Phe Leu Ser Asn Thr Gln Ser Leu Met  
 321 465 470 475 480  
 323 Thr Asn Ile Asp His Gln Ser Ser Val Ser Asp Asp Ser Val Thr Val  
 324 485 490 495  
 326 Cys Gly Asn Val Val Gly Tyr Gly Gly Tyr Gln Gly Phe Ala Ala Pro

VERIFICATION SUMMARY  
PATENT APPLICATION: US/09/980,364 DATE: 06/02/2002  
TIME: 17:15:45

Input Set : A:\PTO.AMC.txt  
Output Set: N:\CRF3\05312002\I980364.raw

L:16 M:271 C: Current Filing Date differs, Replaced Current Filing Date